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**SEMIANNUAL GROUNDWATER
MONITORING REPORT
FOR FEBRUARY 1996**

**THE MONADNOCK COMPANY
18301 ARENTH AVENUE
CITY OF INDUSTRY, CALIFORNIA**

APRIL 1996

SEMIANNUAL GROUNDWATER MONITORING REPORT FOR FEBRUARY 1996

**THE MONADNOCK COMPANY
18301 ARENTH AVENUE
CITY OF INDUSTRY, CALIFORNIA**

April 1996

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TABLE OF CONTENTS

RECEIVED

1.0	INTRODUCTION.....	96 MAY -9 PM.12:00. 1
1.1	Background	CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION 1
1.2	Hydrogeologic Conditions.....	
1.3	Groundwater Monitoring Program.....	2
1.4	Groundwater Remediation System	2
2.0	FIELD PROCEDURES.....	3
3.0	RESULTS AND DISCUSSION	4
3.1	Field Parameters	4
3.2	Water-Level Elevations.....	4
3.3	Laboratory Analyses and Results	4
3.3.1	Current Extent of VOC-Impacted Groundwater.....	4
3.3.2	Historical VOC Concentration Trends	5
3.3.3	Current Metals and Cyanide Results	5
3.3.4	Historical Metals and Cyanide Results	6
4.0	QUALITY ASSURANCE/QUALITY CONTROL.....	7
4.1	Data Validation.....	7
4.2	QA/QC Sample Analysis Results	8
5.0	SUMMARY.....	9

TABLES

- 3-1 Field Parameters at Completion of Purgung
- 3-2 Historical Water-Level Elevation Measurements
- 3-3 Historical Groundwater Analytical Results
- 4-1 Quality Assurance/Quality Control Samples - February 1996 Compliance Monitoring
- 4-2 Quality Assurance/Quality Control Sample Results - February 1996 Compliance Monitoring

FIGURES

- 1-1 Site Location Map
- 3-1 Site Plan and Potentiometric Surface Map - February 1996
- 3-2 Total VOC Concentration Contour Map - February 1996

APPENDICES

- A Water Sample Logs
- B Analytical Laboratory Reports and Chain-of-Custody Forms

1.0 INTRODUCTION

This report summarizes the sampling procedures and analytical results for groundwater monitoring conducted in February 1996 at the Monadnock Company (Monadnock) facility. TRW Inc. (TRW) conducts semiannual monitoring of eight existing groundwater wells at the Monadnock facility.

1.1 Background

The Monadnock facility is located at 18301 Arent Avenue in City of Industry, California (Figure 1-1). TRW used the former Monadnock facility to fabricate fasteners and electronic hardware from February 1968 through October 1980. Previous manufacturing processes used at the facility included degreasing, heat treating, and metal plating. Volatile organic compounds (VOCs) have been detected in groundwater beneath the facility and include 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), chloroform, 1,2-dichloroethane (1,2-DCA), 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), 1,1,2-trichloroethane (1,1,2-TCA), and tetrachloroethene (PCE). In addition, cadmium, chromium, and cyanide have been detected in the groundwater.

1.2 Hydrogeologic Conditions

The Monadnock facility is located in the southern San Gabriel Basin, a broad piedmont alluvial plain occupying the northern portion of the Los Angeles Basin. The site lies within the Puente Valley, a northwesterly-oriented sub-basin that merges with the main San Gabriel Basin approximately five miles northwest of the site. The Monadnock site and vicinity are underlain by Quaternary alluvial deposits that comprise the basinfill sequence of the San Gabriel Basin. The approximate depth to bedrock beneath the alluvial sequence in this area of the Puente Valley is about 100 feet. Bedrock of the Puente Valley is comprised of relatively impermeable sedimentary rock of Tertiary age.

Alluvial stratigraphy within the Puente Valley is complex and lithologic units are laterally discontinuous. Local and regional geologic data indicate the stratigraphy is comprised of an interfingering sequence of clays, clayey to silty sands and clean sands, and clayey to sandy gravels.

The first occurrence of groundwater beneath the site and vicinity is about 30 feet below ground surface (bgs), generally within a discontinuous silty to sandy clay lens of variable thickness (generally 10 to 15 feet). This clay lens occurs beneath a sand unit designated as the "upper" sand (most of which is unsaturated), and above a deeper sand unit designated as the "lower" sand. The lower sand is silty to clayey in nature and contains abundant gravel. This lower sand generally extends from a depth of about 40 feet to a depth up to about 85 feet bgs, according to lithologic data from the two deepest boreholes advanced onsite [borings MW-10 (abandoned by TRW in 1991) and MW-11]. Below a depth of about 85 feet, a clean gravelly sand occurs, the thickness of which has not been investigated.

Seven monitoring wells in the site area extend to depths between 45 and 60 feet bgs and are screened within the upper sand unit, the silty clay lens (where present), and a portion of the underlying lower sand unit. One monitoring well, MW-11, extends to a depth of 97 feet and is screened within the lower sand unit and the underlying clean gravelly sand encountered at a depth of 85 feet.

The direction of groundwater flow beneath the site and vicinity is generally to the west-southwest, and is influenced primarily by the structural orientation of the Puente Valley sub-basin.

1.3 Groundwater Monitoring Program

The groundwater monitoring program for the site includes seven monitoring wells installed prior to 1995 (MW-1 through MW-4, MW-7, MW-8, and MW-11), in addition to the new monitoring well installed at the Presto Food Products site in August 1995 (MW-12). Groundwater samples are analyzed for halogenated volatile organics by EPA Method 601/8010, total chromium and cadmium by EPA Method 3005/6010, and total cyanide by EPA Method 335.2/9010. During the February 1996 monitoring event, all eight wells were sampled using the field procedures described in Section 2.0. However, the water level in well MW-2 was not measured because the well is now used for groundwater extraction, as discussed in Section 1.4.

1.4 Groundwater Remediation System

A groundwater remediation system was implemented at the site in November 1995 utilizing shallow well MW-2 for extraction. Extracted groundwater is treated onsite using carbon adsorption and ion exchange units and is discharged to the onsite storm-drain system under a National Pollution Discharge Elimination System (NPDES) Permit.

2.0 FIELD PROCEDURES

TRW personnel conducted the February 1996 monitoring event. Groundwater samples were collected from the eight monitoring wells on February 5-6, 1996. Static groundwater levels in wells MW-1, MW-3, MW-4, MW-7, MW-8, MW-11, and MW -12 were measured on February 5, 1996. A water-level measurement was not taken from well MW-2 as it is currently being used as an extraction well. An electronic sounder was used to measure the depth of water below the top of the respective well casing to the nearest 0.01 foot. Water-level elevations for each of the wells are discussed in Section 3.2.

Each monitoring well was purged of a minimum of three well casing volumes prior to sampling. Well purging was accomplished using a 3.5-inch diameter PVC bailer. Measurements of pH, specific conductivity, and temperature were recorded at periodic intervals during the purging of each well. Water-level measurement, well purging, and well sampling data were recorded for each well on water sample logs. Copies of these logs are contained in Appendix A.

Groundwater levels were again measured in each of the wells after purging. Groundwater samples were collected from each well only after either the water level had recovered to at least 80 percent of its level measured before purging had begun, or a minimum of three hours had elapsed since the conclusion of well purging.

Groundwater samples were collected with a Teflon bailer, transferred to appropriately-sized and labeled bottles supplied by the analytical laboratory, stored in a portable ice chest, and cooled with ice until delivery to the analytical laboratory. Groundwater samples collected for analysis of halogenated volatile organics (EPA Method 601) were transferred to 40-milliliter VOA vials; groundwater samples collected for analysis of total chromium and total cadmium were transferred to 200-milliliter plastic bottles; groundwater samples collected for analysis of cyanide were transferred to 300-milliliter plastic bottles. Each of the VOA vials was completely filled in a manner such that no headspace existed.

Duplicate samples were collected from each well, though in most instances only one sample was analyzed by the laboratory. The duplicate samples were for emergency and/or confirmation purposes.

Groundwater samples were delivered under chain-of-custody documentation to CKY Inc. (CKY), a California-certified hazardous waste analytical laboratory located in Torrance, California, for chemical analysis.

Purging and sampling equipment was cleaned between use in each well. The bailers were then suspended from a new nylon rope or monofilament line to minimize the potential for cross-contamination. Decontamination was conducted with a non-phosphate detergent wash and followed by three deionized water rinses.

Wastewater, generated from purging and decontamination activities, was collected in 55-gallon drums. The drummed wastewater was then properly disposed of offsite by TRW.

3.0 RESULTS AND DISCUSSION

3.1 Field Parameters

The field parameters measured in each well at the completion of purging are listed in Table 3-1. These parameters had stabilized to within ten percent for successive measurements at the completion of purging in all wells.

3.2 Water-Level Elevations

Historical water-level elevation data for the eight monitoring wells are presented in Table 3-2. The historical data include the measured depths to groundwater and the calculated water-level elevations recorded for each well since June 1994, in addition to the current data recorded in February 1996.

Water-level elevation contours for the shallow saturated interval beneath the site were generated using the February 1996 data (Figure 3-1). Water-level elevation contours were not generated for the deeper interval because only one well (MW-11) is completed in this interval.

The water-level elevation contours for February 1996 indicate that the direction of groundwater flow in the shallow interval is to the southwest at an average horizontal hydraulic gradient of about 0.006. The approximate impact to shallow groundwater from pumping at well MW-2, as indicated by the water-level contours, was estimated based on current and historic water-level elevations and the results of a capture zone analysis. The direction of groundwater flow and the magnitude of the gradient, which has varied historically from about 0.006 to 0.008, are consistent with previous monitoring events.

A vertical hydraulic gradient in the downward direction is apparent beneath the site between the intervals in which the shallow wells and the deeper well are completed. The magnitude and direction of the vertical gradient are similar to previous monitoring events.

3.3 Laboratory Analyses and Results

Groundwater samples were analyzed for halogenated volatile organics by EPA Method 601/8010, total chromium and cadmium by EPA Method 3005/6010, and cyanide by EPA Method 9010. Results of the February 1996 analyses, in addition to historical analytical results from previous monitoring events, are presented in Table 3-3. Copies of the chain-of-custody forms and the analytical laboratory reports are presented in Appendix B.

3.3.1 Current Extent of VOC-Impacted Groundwater

The February 1996 analytical results indicate that the VOCs currently present in groundwater beneath the site and vicinity include 1,1-DCE, TCE, PCE, and 1,1,2-TCA. Only shallow wells MW-2, MW-7, MW-8, MW-12, and deeper well MW-11 are presently impacted by VOCs. In the four shallow wells impacted, total VOC concentrations range from 33 µg/l in well MW-8 to 670

$\mu\text{g/l}$ in well MW-12. In deeper well MW-11, the total VOC concentration is 55.8 $\mu\text{g/l}$. Upgradient wells MW-1, MW-4 and crossgradient well MW-3 are not impacted by VOCs. The concentrations of 1,1-DCE, TCE, and PCE in the four shallow impacted wells, and the concentrations of 1,1-DCE and TCE in the deeper well, exceed regulatory standards.

Total VOC concentration contours were generated for the shallow interval using the February 1996 analytical data, and are shown on Figure 3-2. Total VOC concentration contours are not generated for the deeper interval because only one well is completed in this interval. The February 1996 total VOC concentration contours indicate that the shallow plume of impacted groundwater beneath the site is oriented in a southwesterly direction, similar to the direction of groundwater flow. The plume extends offsite in the downgradient direction to the location of the Presto Food Products site. The axis of the plume appears to be through the area of onsite well MW-2 (370.5 $\mu\text{g/l}$ total VOCs) and offsite well MW-12 (670 $\mu\text{g/l}$ total VOCs), based on the presence of the highest concentrations of VOCs in these two wells. The plume is limited in lateral extent, as crossgradient well MW-3 is not impacted, and crossgradient well MW-8 (33 $\mu\text{g/l}$ total VOCs) exhibits an order of magnitude decrease in total VOCs, relative to well MW-2. VOC concentrations attenuate with depth, as deeper well MW-11 (55.8 $\mu\text{g/l}$ total VOCs) exhibits appreciably lower VOC concentrations than shallow wells MW-2 and MW-7 (174 $\mu\text{g/l}$ total VOCs).

3.3.2 Historical VOC Concentration Trends

The historical groundwater analytical results for the site indicate that there has been a decreasing trend in VOC concentrations since monitoring began in July 1986. In well MW-2, concentrations of 1,1,1-TCA have decreased to nondetectable levels from a maximum of 380 $\mu\text{g/l}$ in July 1986, and TCE and PCE levels have decreased to 200 and 69 $\mu\text{g/l}$, respectively, from maximum levels of 710 and 770 $\mu\text{g/l}$, respectively. In well MW-7, more than half of the VOCs that have been historically detected are now at nondetectable levels, and TCE and PCE concentrations have exhibited a decreasing trend since March 1987. TCE and PCE levels in well MW-7 have decreased to 120 $\mu\text{g/l}$ and 18 $\mu\text{g/l}$, respectively, from maximum levels of 456 $\mu\text{g/l}$ and 160 $\mu\text{g/l}$, respectively. Similarly, the majority of the historically detected VOCs in shallow well MW-8 and deeper well MW-11 are now at nondetectable levels; only 1,1-DCE and TCE in both of these wells, in addition to PCE in well MW-8, are currently present at levels that exceed regulatory standards (see Table 3-3). VOCs have been absent in wells MW-1, MW-3, and MW-4 since monitoring began, with the exception of several isolated occurrences when VOCs were detected at low concentrations that were generally below regulatory standards (see Table 3-3).

3.3.3 Current Metals and Cyanide Results

The February 1996 analytical results indicate that cyanide and chromium are currently present in groundwater beneath the Monadnock site and vicinity; cadmium is currently not present at detectable levels. Chromium is present at detectable levels in four wells (MW-2, MW-7, MW-8, and MW-12) at concentrations ranging from 20.5 to 85.6 $\mu\text{g/l}$; only the concentration in well MW-2 (85.6 $\mu\text{g/l}$) exceeds the regulatory standard of 50 $\mu\text{g/l}$. Cyanide is present in three wells (MW-2, MW-7, and MW-12) at concentrations ranging from 0.37 to 1.60 mg/l; there is currently no established regulatory standard for cyanide.

3.3.4 Historical Metals and Cyanide Results

Historical metals and cyanide concentrations for the site are only available since August 1994. These data indicate that cadmium has been detected at the site on only one occasion (August 1994) and was present in only three wells (MW-3, MW-7, and MW-8) at concentrations below the regulatory standard ($10 \mu\text{g/l}$). Historic chromium results have been variable; in addition to the four wells that currently (February 1996) exhibit detectable chromium levels, the remaining four wells have also indicated the presence of chromium during previous monitoring events. However, only well MW-2 has exhibited chromium levels that exceed the regulatory standard, with the exception of the August 1994 chromium results for wells MW-7 and MW-8. Historic cyanide results indicate that wells MW-2, MW-7, and MW-12 have previously had detectable cyanide concentrations, although the concentrations in well MW-7 have decreased since August 1994. In addition, well MW-4 was also previously impacted by cyanide in March 1995.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

Field and laboratory quality assurance/quality control (QA/QC) procedures were employed during the February 1996 monitoring event, as during the previous compliance monitoring events, to document that the sampling results meet accepted QA/QC standards. The QA/QC procedures employed included 1) collecting and analyzing field samples to assess field QA/QC procedures, 2) preparing and analyzing laboratory samples to assess the performance of the analytical laboratory, and 3) conducting data validation in accordance with the protocols described below. Additional procedures employed in the field for QA/QC purposes included sequencing the sampling in such a manner that the wells with the lowest levels of contamination were sampled prior to those with the highest levels.

QA/QC samples collected or prepared for the February 1996 sampling event are listed in Table 4-1. The QA/QC samples collected in the field included one equipment blank and one duplicate sample. The QA/QC samples prepared by the analytical laboratory included one trip blank and one duplicate sample, in addition to numerous method blanks, matrix spike and matrix spike duplicates, and laboratory control samples. Table 4-1 contains a description of the collection and/or preparation procedures for each type of QA/QC sample.

4.1 Data Validation

Laboratory results for the February 1996 monitoring event were reviewed in accordance with U.S. Environmental Protection Agency (EPA) guidelines for data validation (National Functional Guidelines for Organic Data Review, June 1991). The data validation process consisted of reviewing the laboratory results for the following parameters: 1) completeness of the data package, 2) compliance with EPA-required holding times, 3) surrogate recovery results for each well sample, 4) agreement of dilution factors with reported detection limits, 5) presence or absence of analytes in the equipment, trip, and method blanks, 6) percent recovery and relative percent difference results for matrix spike and matrix spike duplicate analyses, and 7) percent recovery results for laboratory control samples.

Based on guidance provided in the EPA guidelines, sample analytical data may be qualified as "J" (estimated), "UJ" (not detected-estimated), or "R" (rejected). Review of the laboratory data package for the February 1996 analyses indicated that no sample data required qualification during this sampling event.

Results of the data validation indicated that the laboratory data packages were complete, that no analysis holding times were exceeded, and that reported detection limits were consistent with the sample dilution factors. Additional data validation results are discussed in Section 4.2.

4.2 QA/QC Sample Analysis Results

The results of the QA/QC sample analyses for the February 1996 monitoring event are presented in Table 4-2. These results indicated that no VOCs were detected in the equipment blank and the trip blank that accompanied the sample vials during transport to and from the field.

Relative percent difference for the duplicate samples were within acceptable values. The laboratory method blank results indicated detectable concentrations of VOCs were not present. The results of the matrix spike and matrix spike duplicate (MS/MSD) pairs for VOCs all indicated percent recoveries and relative percent difference within acceptable limits. The percent recoveries for laboratory control samples were within acceptable limits.

5.0 SUMMARY

During the February 1996 semiannual monitoring event at the Monadnock site, the eight monitoring wells at the site and vicinity were included in the sampling program. Water levels were monitored in seven of the eight wells (MW-2 was excluded), and groundwater samples were collected from the eight wells and analyzed for VOCs, chromium, cadmium, and cyanide.

The results of the February 1996 monitoring event indicate that water-level elevations continue to demonstrate a southwesterly direction of groundwater flow. A slight downward vertical gradient was also indicated by the February water-level data, which is similar to previous events.

The February 1996 analytical results indicate that the shallow plume of VOC-impacted groundwater beneath the site is oriented in a southwesterly direction. The plume appears to be limited in lateral extent (crossgradient) and extends offsite in the downgradient direction to the Presto Food Products site. The February 1996 analytical results are consistent with the decreasing trend in groundwater VOC concentrations that has been observed at the site since monitoring began in 1986. In several wells (MW-7, MW-8, and MW-11), the majority of the historically detected VOCs are now at nondetectable levels, although the concentrations of TCE, PCE, and 1,1-DCE continue to exceed regulatory standards. Shallow wells MW-2, MW-7, MW-8, MW-12, and deeper well MW-11 presently contain VOCs at levels that exceed regulatory standards.

The results of metals and cyanide analyses conducted during the February 1996 monitoring event indicate that chromium and cyanide are present in groundwater beneath the site and vicinity. Chromium concentrations exceed the regulatory standard in only one well (MW-2); there is no established regulatory standard for cyanide.

TABLES

TABLE 3-1
FIELD PARAMETERS AT COMPLETION OF PURGING

WELL NUMBER	DATE	pH	SPECIFIC CONDUCTIVITY ($\mu\text{mhos/cm}$)	TEMPERATURE (°F)
MW-1	2/5/96	6.89	1587	72.3
MW-2	2/5/96	*	*	*
MW-3	2/5/96	7.18	1456	69.5
MW-4	2/5/96	7.01	13.78	73.4
MW-7	2/6/96	6.86	1236	70.8
MW-8	2/5/96	6.89	1362	73.9
MW-11	2/6/96	7.11	1139	69.6
MW-12	2/5/96	7.07	1291	71.0

MW-2 was not purged as it is currently being used as an extraction well.
MW-3 was bailed dry @ 23 gallons.

TABLE 3-2
HISTORICAL WATER-LEVEL ELEVATION MEASUREMENTS

Well Number	Date Measured	Depth to Water (feet below top of casing)	Top of Casing Elevation ^(a) (feet, MSL)	Water Surface Elevation ^(a) (feet, MSL)
MW-1	Jun 94	32.27	412.68	380.41
	Aug 94	32.49		380.19
	Mar 95	31.82		380.86
	Aug 95	31.55		381.13
	Feb-96	32.57		380.11
MW-2	Jun 94	30.25	408.01	377.76
	Aug 94	30.55		377.46
	Mar 95	29.73		378.28
	Aug 95	29.84		378.17
	Feb-96	N.M.		N.A.
MW-3	Jun 94	30.21	408.52	378.31
	Aug 94	30.74		377.78
	Mar 95	29.86		378.66
	Aug 95	29.94		378.58
	Feb-96	30.89		377.63
MW-4	Jun 94	32.80	412.95	380.15
	Aug 94	32.99		379.96
	Mar 95	32.28		380.67
	Aug 95	32.04		380.91
	Feb-96	33.05		379.90
MW-7	Jun 94	31.35	409.16	377.81
	Aug 94	31.71		377.45
	Mar 95	31.03		378.13
	Aug 95	30.98		378.18
	Feb-96	32.06		377.10
MW-8	Jun 94	31.25	409.00	377.75
	Aug 94	31.54		377.46
	Mar 95	30.95		378.05
	Aug 95	30.75		378.25
	Feb-96	31.66		377.34
MW-11	Jun 94	31.59	408.93	377.34
	Aug 94	32.07		376.86
	Mar 95	31.26		377.67
	Aug 95	31.28		377.65
	Feb-96	32.13		376.80
MW-12	Aug 95	30.50	406.91	376.41
	Feb-96	30.70		376.21

^(a) Elevations relative to mean sea level (MSL)

N.M. - Not Measured

N.A. - Not Analyzed

TABLE 3-3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS

Well Number	1,1-DCE (µg/l)	1,1-DCA (µg/l)	CFM (µg/l)	1,2-DCA (µg/l)	1,1,1-TCA (µg/l)	TCE (µg/l)	1,1,2-TCA (µg/l)	PCE (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Cyanide (mg/l)
Drinking Water Standard	6	5	NE	0.5	200	5	32	5	10	50	NE
MW-1											
Jul-86	NA	NA	NA	NA	<25	<25	NA	<25	NA	NA	NA
Sep-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nov-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jan-89	NA	NA	NA	NA	ND	ND	NA	ND	NA	NA	NA
Jun-89	ND	NA	NA	NA	ND	ND	NA	ND	NA	NA	NA
Jan-90	ND	NA	NA	NA	ND	ND	NA	1.3	NA	NA	NA
Jun-94	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	NA
Aug-94	<1	<1	<1	<1	<1	<1	<1	<1	<1	7.7	<0.01
Mar-95	<1	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.01
Aug-95	1.5	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.1
Feb-96	<1	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.2
MW-2											
Jul-86	NA	NA	NA	NA	380	710	NA	310	NA	NA	NA
Sep-86	NA	NA	NA	NA	180	560	NA	600	NA	NA	NA
Nov-86	NA	NA	NA	NA	350	710	NA	770	NA	NA	NA
Feb-87	NA	NA	NA	NA	77	620	NA	190	NA	NA	NA
Mar-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-87	NA	NA	NA	NA	12	182	NA	102	NA	NA	NA
Feb-88	NA	NA	NA	NA	25	102	NA	78	NA	NA	NA
Jan-89	NA	NA	NA	NA	ND	120	NA	70	NA	NA	NA
Jun-89	180	NA	NA	NA	ND	270	NA	320	NA	NA	NA
Jan-90	840	NA	NA	NA	7	460	NA	410	NA	NA	NA
Jun-94	120	10	2.4	3.3	<1	590	21	130	NA	NA	NA
Aug-94	160	8.6	1.3	3.4	<1	390	19	100	<1	162	0.57
Mar-95	176	8.3	2.5	4.1	<1	330	17.5	102	<5	206	<0.01
Aug-95	82	5.8	2.1	2	<1	170	<1	12	<5	164	1.82
Feb-96	98	<2.5	<2.5	<2.5	<2.5	200	3.5	69	<5	85.6	1.60

TABLE 3-3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS

Well Number	1,1-DCE (µg/l)	1,1-DCA (µg/l)	CFM (µg/l)	1,2-DCA (µg/l)	1,1,1-TCA (µg/l)	TCE (µg/l)	1,1,2-TCA (µg/l)	PCE (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Cyanide (mg/l)
Drinking Water Standard	6	5	NE	0.5	200	5	32	5	10	50	NE
MW-3											
Jul-86	NA	NA	NA	NA	<5	<5	NA	<5	NA	NA	NA
Sep-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nov-86	NA	NA	NA	NA	6	4	NA	100	NA	NA	NA
Feb-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-88	NA	NA	NA	NA	2	2.6	NA	6.2	NA	NA	NA
Jan-89	NA	NA	NA	NA	ND	ND	NA	ND	NA	NA	NA
Jun-89	ND	NA	NA	NA	1	2	NA	6	NA	NA	NA
Jan-90	ND	NA	NA	NA	ND	2	NA	ND	NA	NA	NA
Jun-94	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	NA
Aug-94	<1	<1	<1	<1	<1	<1	<1	<1	1.4	14.3	<0.01
Mar-95	<1	<1	<1	<1	<1	<1	<1	<1	<5	23.9	<0.01
Aug-95	1.4	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.1
Feb-96	<1	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.2
MW-4											
Jul-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nov-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-87	NA	NA	NA	NA	0.5	1	NA	1.6	NA	NA	NA
Sep-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jan-89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jun-89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jan-90	ND	NA	NA	NA	ND	ND	NA	1.9	NA	NA	NA
Jun-94	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	NA
Aug-94	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.4	<0.01
Mar-95	<1	<1	<1	<1	<1	<1	<1	<1	<5	<10	2.67
Aug-95	1.1	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.1
Feb-96	<1	<1	<1	<1	<1	<1	<1	<1	<5	<10	<0.2

TABLE 3-3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS

Well Number	1,1-DCE (µg/l)	1,1-DCA (µg/l)	CFM (µg/l)	1,2-DCA (µg/l)	1,1,1-TCA (µg/l)	TCE (µg/l)	1,1,2-TCA (µg/l)	PCE (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Cyanide (mg/l)
Drinking Water Standard	6	5	NE	0.5	200	5	32	5	10	50	NE
MW-7											
Jul-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nov-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	N.A.	NA
Mar-87	NA	NA	NA	NA	48	456	NA	81	NA	NA	NA
Sep-87	NA	NA	NA	NA	56	200	NA	93	NA	NA	NA
Feb-88	NA	NA	NA	NA	8.2	152	NA	74	NA	NA	NA
Jan-89	NA	NA	NA	NA	ND	200	NA	150	NA	NA	NA
Jun-89	42	NA	NA	NA	50	66	NA	60	NA	NA	NA
Jan-90	440	NA	NA	NA	1.6	400	NA	160	NA	NA	NA
Jun-94	40	<1	1.8	<1	<1	280	2.8	42	NA	NA	NA
Aug-94	140	6.2	2.4	1.7	<1	310	17	60	1.3	115	0.76
Mar-95	66	<1	<1	<1	<1	145	4.5	28	<5	49.6	0.14
Aug-95	43	<1	<1	<1	<1	130	<1	1.9	<5	26.5	0.025
Feb-96	36	<1	<1	<1	<1	120	<1	18	<5	36.3	0.37
MW-8											
Jul-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nov-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-87	NA	NA	NA	NA	32	180	NA	110	NA	NA	NA
Sep-87	NA	NA	NA	NA	3	47	NA	27	NA	NA	NA
Feb-88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jan-89	NA	NA	NA	NA	ND	90	NA	80	NA	NA	NA
Jun-89	180	NA	NA	NA	30	400	NA	320	NA	NA	NA
Jan-90	100	NA	NA	NA	ND	160	NA	56	NA	NA	NA
Jun-94	16	<1	<1	<1	<1	34	<1	6.8	NA	NA	NA
Aug-94	<1	9.4	<1	<1	<1	22	<1	5.5	4.8	135	<0.01
Mar-95	11.7	<1	<1	<1	<1	18.8	<1	3.3	<5	20.4	<0.01
Aug-95	7.9	<1	<1	<1	<1	19	<1	<1	<5	14.4	<0.1
Feb-96	17	<1	<1	<1	<1	35	<1	11	<5	20.5	<0.2

TABLE 3-3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS

Well Number	1,1-DCE (µg/l)	1,1-DCA (µg/l)	CFM (µg/l)	1,2-DCA (µg/l)	1,1,1-TCA (µg/l)	TCE (µg/l)	1,1,2-TCA (µg/l)	PCE (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Cyanide (mg/l)
Drinking Water Standard	6	5	NE	0.5	200	5	32	5	10	50	NE
MW-11											
Jul-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nov-86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mar-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sep-87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Feb-88	NA	NA	NA	NA	ND	26	NA	ND	NA	NA	NA
Jan-89	NA	NA	NA	NA	ND	20	NA	200	NA	NA	NA
Jun-89	50	NA	NA	NA	ND	270	NA	10	NA	NA	NA
Jan-90	231	NA	NA	NA	ND	50	NA	5.5	NA	NA	NA
Jun-94	<1	<1	1.8	<1	<1	86	<1	7	NA	NA	NA
Aug-94	<1	16	<1	<1	<1	49	<1	4.7	<1	13	<0.01
Mar-95	20.3	<1	<1	<1	<1	59.6	<1	4.1	<5	13.1	<0.01
Aug-95	12	<1	<1	<1	<1	43	<1	<1	<5	13.3	<0.01
Feb-96	12	<1	<1	<1	<1	40	<1	3.8	<5	<10	<0.2
MW-12											
Aug-95	250	6.7	4.1	7	<1	540	<1	13	<5	25.6	0.502
Feb-96	230	<5	<5	<5	<5	380	<5	60	<5	37.5	0.38
Feb-96 Dup	210	<5	<5	<5	<5	360	<5	57	NA	N.A	NA

Drinking water standards are Maximum Contaminant Levels (MCLs) as established by the United States Environmental Protection Agency or Drinking Water Action Levels as established by the California Environmental Protection Agency.

NA - Not Analyzed

ND - Not Detected

NE - Drinking water standard (MCL or Action Level) has not been established.

< - Not detected with the detection limit.

1,1-DCE - 1,1-Dichloroethene

1,1-DCA - 1,1-Dichloroethane

1,2-DCA - 1,2-Dichloroethane

1,1,1-TCA - 1,1,1-Trichloroethane

1,1,2-TCA - 1,1,2-Trichloroethane

CFM - Chloroform

PCE - Tetrachloroethene

TCE - Trichloroethene

TABLE 4-1

QUALITY ASSURANCE/QUALITY CONTROL SAMPLES
FEBRUARY 1996 COMPLIANCE MONITORING

Sample Type	Analysis Date	Description
Field QA/QC Samples		
<u>Equipment Blanks</u> M960206-6	2/8/96	Source water for equipment decontamination, collected after pouring through cleaned bailer following sampling of well W-12.
Laboratory QA/QC Samples		
<u>Trip Blanks</u> M960206-1	2/9/96	Laboratory water blank that accompanies sample vials into the field (remains unopened) and is analyzed in same manner as the monitor well water samples.
<u>Method Blanks</u> MBLK1W VAL567B MBLK1W CNB010WB IBLK1W IPB017WB	2/8/96 2/13/96 2/9/96	Laboratory water blank that undergoes same laboratory preparation procedures as the monitor well water samples.
<u>Duplicate Samples</u> M960206-5 (MW-12) M960206-23 (MW-2)	2/9/96 2/9/96	Duplicate sample that is analyzed in the same manner as the monitor well sample.
<u>Matrix Spike Samples</u> M960206-12 (MS)/M960206-12 (MSD) M960206-23 (MS)	2/9/96 2/9/96	Matrix Spike (MS) is a monitor well sample which is "spiked" with solution of known concentration and then analyzed in same manner as the "unspiked" well samples. Matrix spike duplicate is a second spiked sample prepared from same sample aliquot as the matrix spike sample.
<u>Laboratory Control Samples</u>		
LCS1W VAL567L LCS1WD VAL567C LCS1W CNB010WL LCSIWD CNB010WC LCS1W IPB017WL LCSIWD IPB017WC	2/8/96 2/8/96 2/13/96 2/13/96 2/9/96 2/9/96	Prepared solution of known concentration that the laboratory uses as an equipment calibration check.

TABLE 4-2

QUALITY ASSURANCE/QUALITY CONTROL SAMPLE RESULTS
FEBRUARY 1996 COMPLIANCE MONITORING

<u>Sample Type</u>	<u>Results</u>			
Field QA/QC Samples				
<u>Equipment Blank</u> M960206-6	<u>Parameter</u> EPA 8010		<u>Concentration</u>	ND
Laboratory QA/QC Samples				
<u>Trip Blank</u> M960206-1	<u>Parameter</u> EPA 8010		<u>Concentration</u>	ND
Method Blanks				
MLBK1W VAL567B	EPA 8010		ND	
MLBK1W CNB010WB	EPA 335.2		ND	
IBLK1W IPB017WB	EPA 3005-6010		ND	
<u>Duplicate Sample</u>	<u>Parameter</u>	<u>Sample</u>	<u>Sample Duplicate</u>	<u>RPD</u>
M960206-5 (MW-12)	EPA 8010 1,1-DCE TCE PCE	µg/L 210 360 57	µg/L 230 380 60	9 5 5
M960206-23 (MW-2)	EPA 3005/6010 Cadmium Chromium	µg/L ND 85.6	µg/L ND 84.5	0 1
<u>Spike Samples</u>	<u>Parameters</u>	<u>Percent Recovery (S/SD)</u>	<u>RPD</u> ²	
M960206-12 (MS)/ M960206-12 (MSD)	EPA 8010 1,1-DCE TCE Chlorobenzene	101/93 97/92 105/104	8 6 2	
M960206-23 (MS)	EPA 3005/6010 Cadmium Chromium	99/n.a. 102/n.a.	n.a. n.a.	

TABLE 4-2 (Continued)

**QUALITY ASSURANCE/QUALITY CONTROL SAMPLE RESULTS
FEBRUARY 1996 COMPLIANCE MONITORING**

Sample Type		Results		
Laboratory Control Samples	Parameter	LCS Results	LCS True Value	Percent Recovery
LCS1W VAL567L	EPA 8010	µg/L	µg/L	
	1,1-DCE	22.20	20.00	111
	TCE	22.50	20.00	112
LCS1WD VAL567C	Chlorobenzene	22.00	20.00	110
	EPA 8010	µg/L	µg/L	
	1,1-DCE	22.20	20.00	111
LCS1W CNB010WL	TCE	21.80	20.00	109
	Chlorobenzene	22.00	20.00	110
	EPA 335.2	mg/L	mg/L	
LCS1WD CNB010WC	Cyanide	0.026	0.025	104
	EPA 335.2	mg/L	mg/L	
	Cyanide	0.025	0.025	100
LCS1W IPB017WL	EPA 3005/6010	µg/L	µg/L	
	Cadmium	930	1000	93
	Chromium	953	1000	95
LCS1WD IPB017WC	EPA 3005/6010	µg/L	µg/L	
	Cadmium	977	1000	98
	Chromium	1012	1000	101

¹ - ND (1) indicates not detected at laboratory detection limit of 1 µg/l

² - Relative percent difference calculated as:

$$\frac{(\text{Sample value} - \text{duplicate value})}{(\text{Sample value} + \text{duplicate value})/2} \times 100$$

MS - Matrix Spike

MSD - Matrix Spike Duplicate

FIGURES

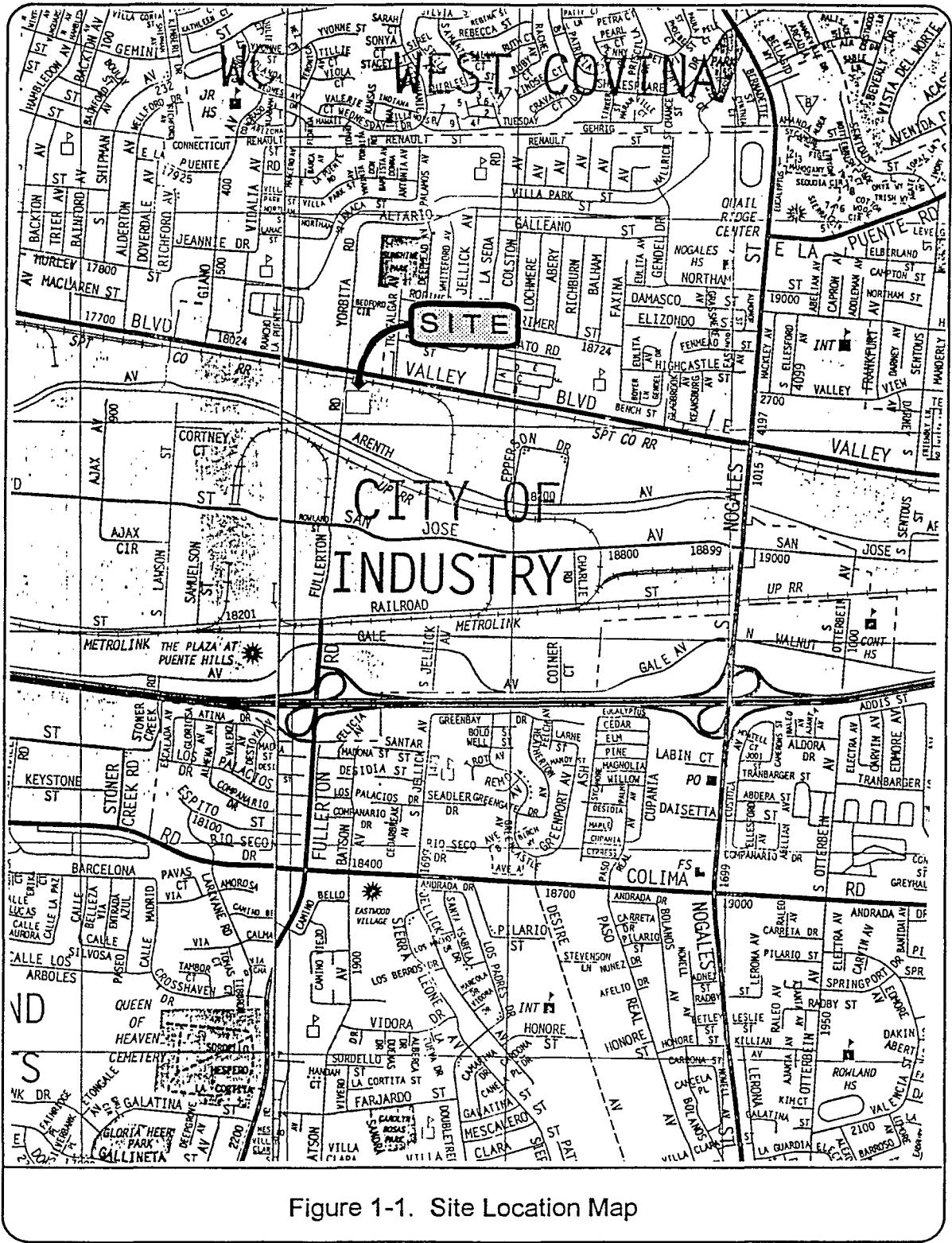
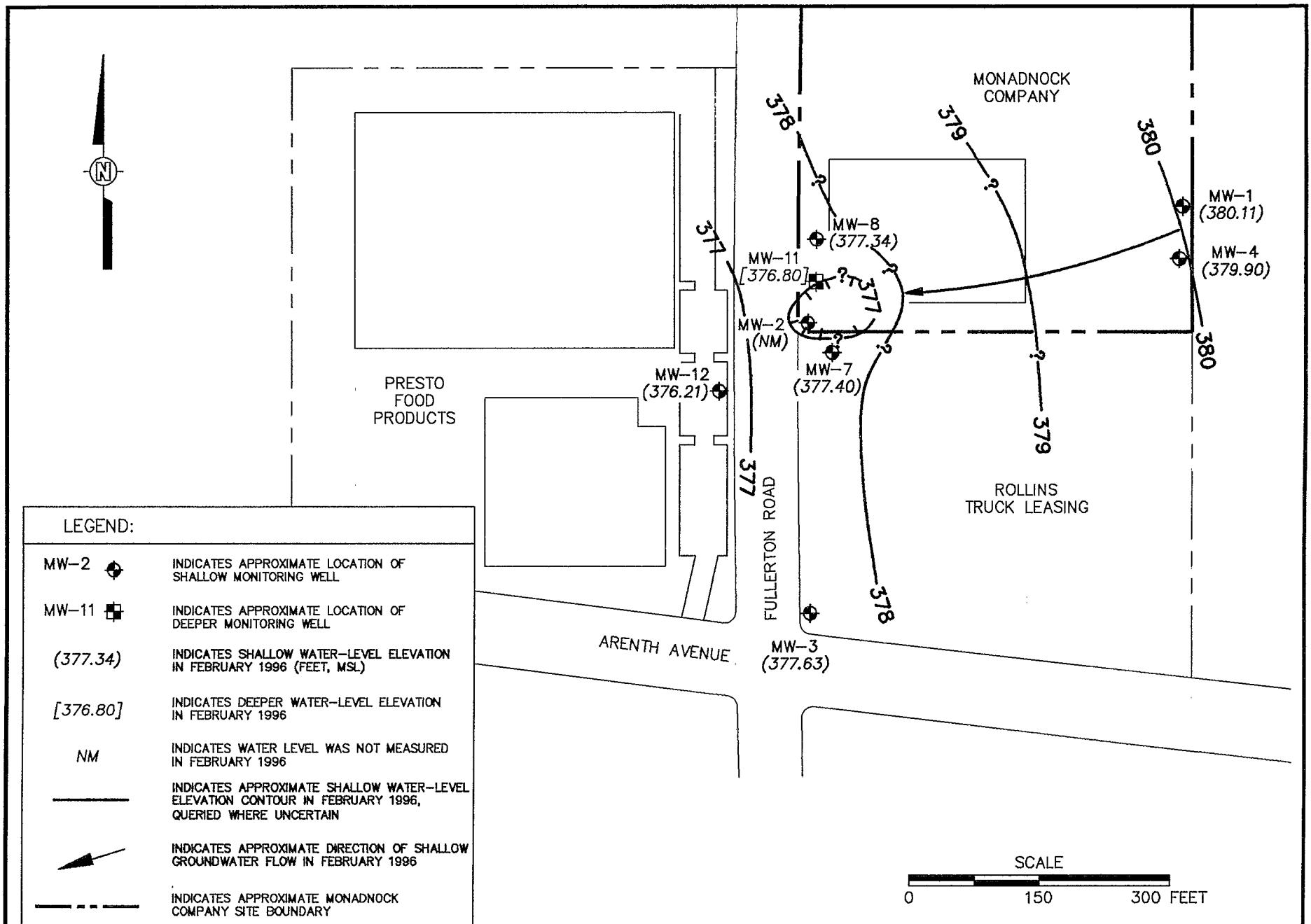


Figure 1-1. Site Location Map



FILE NAME			
REV	D	DRAFT FOR TRW REVIEW	MBM 3-29-96
MONA2.DWG		DESCRIPTION OF REVISION	BY DATE

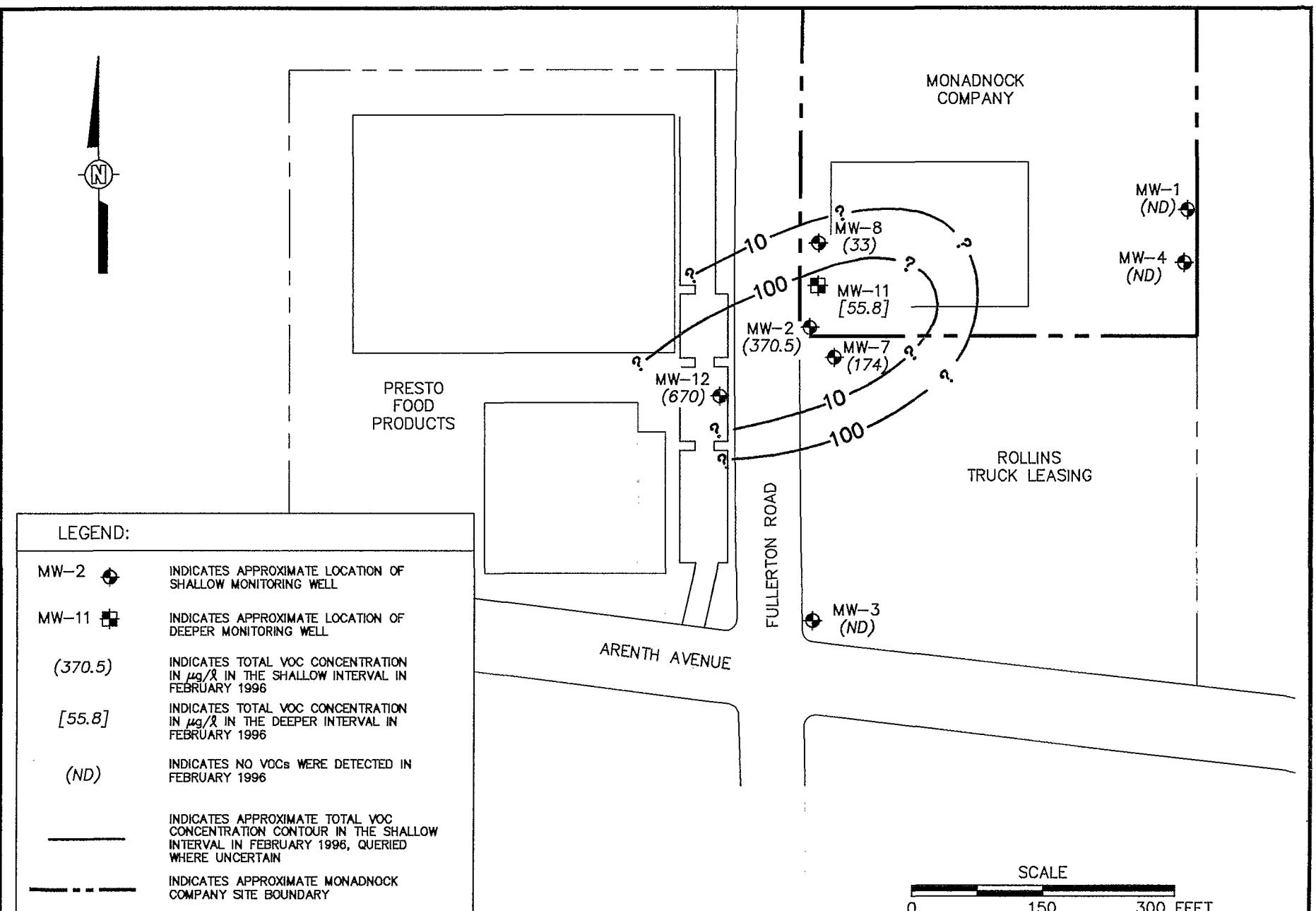
TRW
TRW INC.
1900 Richmond Road
Cleveland, Ohio 44124

ORION
Orion Environmental Inc.
3450 E. Spring St., Suite 212
Long Beach, California 90806
(310) 988-2755

DESIGNED	LAN
DRAWN	MBW
REVIEWED	LAN
CHECKED	SJG
SCALE	1"=150 FEET
DATE	3-29-96

THE MONADNOCK COMPANY
**SITE PLAN AND
POTENTIOMETRIC SURFACE MAP
FEBRUARY 1996**

REVISION **0**
PROJECT MON.02.96.003
FIGURE **3-1**



FILE NAME	REV	DRAFT FOR TRW REVIEW	MBM	3-29-96
MONA2.DWG	0	DESCRIPTION OF REVISION	BY	DATE

TRW
TRW INC.
1800 Eastmoor Road
Cleveland, Ohio 44124

ORION
Orion Environmental Inc.
3450 E. Spring St., Suite 212
Long Beach, California 90806
(310) 988-2755

DESIGNED	LAN
DRAWN	NDM
REVIEWED	LAN
CHECKED	SJC
SCALE	1"=150 FEET
DATE	3-29-96

THE MONADNOCK COMPANY
TOTAL VOC CONCENTRATION CONTOUR MAP
FEBRUARY 1996
PROJECT MON.02.96.003
FIGURE 3-2

APPENDIX A

WATER SAMPLE LOGS

WATER SAMPLE LOG

Project Name: Monadnock Date: 2-5-96
 Well No.: MW-1 Location: ON - S. TE Collected By: BW & LR

Well Purging Method: 3.5" PVC BAILEY
 Total Depth (ft.): 47.45 H₂O Level (ft.): 32.57 Height of Water Column: 14.88
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes No
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .63 gal./ft. x 14.88 ft. = 29.01 gal.

Time	Purged (gallons)	Temp F °	mΩ	pH	Notes
1140	00				
1148	10	74.1	1674	6.86	H ₂ O Cloudy Light Brown
1150	15	74.4	1636	6.86	" " "
1152	20	73.6	1603	6.83	H ₂ O Cloudy Brown
1200	23	72.3	1587	6.89	" "
*					Well Bailed Dry @ 23 GA.

Total Purged (gallons): 23.0 No. of Casing Volumes: 2.37
 Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record:

- Ph Meter Calibration: Zeroed to: _____ Spanned to: _____
- Ambient Temp. 65 ° Clear, Sunny, Foggy, Partly Cloudy, Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes _____ No

Notes: _____

WATER SAMPLE LOG

Project Name: Monadnock Date: 2-5-96
 Well No.: MW-3 Location: OFF - S.TE Collected By: LR & BW

Well Purging Method: 3.5" PVC BAILER
 Total Depth (ft.): 45.63 H₂O Level (ft.): 30.87 Height of Water Column: 14.76
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes No _____
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .65 gal./ft. x 14.76 ft. = 28.18 gal.

Time	Purged (gallons)	Temp F °	mΩ	pH	Notes
1215	00				
1224	5	72.6	1499	7.18	H ₂ O Cloudy - light brown
1229	10	71.1	1477	7.09	" " " "
1231	12	70.2	1475	7.01	" " " "
1233	15	70.0	1471	6.97	" " " "
1236	17	69.5	1456	7.18	" " " "
					Well bailed Dry at 17 gal

Total Purged (gallons): 17 No. of Casing Volumes: 1.77
Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record:

- Ph Meter Calibration: Zeroed to: _____ Spanned to: _____
- Ambient Temp. 66 ° Clear, Sunny, Foggy, Partly Cloudy, Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes _____ No

Notes: _____

WATER SAMPLE LOG

Project Name: Monadnock Date: 2/5/96
 Well No.: MW-4 Location: ON-Site Collected By: LR/BW

Well Purging Method: 3.5" PVC Bailer
 Total Depth (ft.): 49.18 H₂O Level (ft.): 33.00 Height of Water Column: 16.18
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes No
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .65 gal./ft. x 16.18 ft. = 31.55 gal.

Time	Purged (gallons)	Temp F °	mΩ	pH	Notes
1055	00				
1111	10	73.7	1470	7.07	H ₂ O Cloudy Brown
1116	15	73.0	1432	7.02	" " "
1119	20	72.5	1397	7.01	" " "
1124	25	73.0	1403	7.00	" " "
1126	27	73.4	13.78	7.01	" " "
					Well bailed dry at 27 gal.

Total Purged (gallons): 27 No. of Casing Volumes: 2.56
Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record:

- Ph Meter Calibration: Zeroed to: _____ Spanned to: _____
- Ambient Temp. 65 ° Clear, Sunny, Foggy, Partly Cloudy, Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes _____ No _____

Notes: _____

WATER SAMPLE LOG

Project Name: Monadnock Date: 2-6-96
 Well No.: MW-7 Location: CFF-SITE Collected By: LR & BW

Well Purging Method: 3.5' PVC BAILER
 Total Depth (ft.): 56.43 H₂O Level (ft.): 32.05 Height of Water Column: 24.38
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes No
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .65 gal./ft. x 24.38 ft. = 47.54 gal.

Time	Purged (gallons)	Temp F °	mΩ	pH	Notes
0905	00				
0914	10	70.3	1334	6.75	H ₂ O Cloudy Brown
0918	20	70.5	1270	6.80	" " "
0921	30	70.7	1273	6.87	" " "
0924	40	70.8	1248	6.89	" " "
0926	48	70.8	1236	6.86	" " "

Total Purged (gallons): 48.0 No. of Casing Volumes: 3
Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record: _____

- Ph Meter Calibration: Zeroed to: _____ Spanned to: _____
- Ambient Temp. 65 ° Clear, Sunny, Foggy, Partly Cloudy, Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes ✓ No _____

Notes: _____

WATER SAMPLE LOG

Project Name: Monadnock Date: 2-5-96
 Well No.: MW-2 Location: CW-SITE Collected By: BW & LR

Well Purging Method: 3.5" PVC BAILER
 Total Depth (ft.): 51.50 H₂O Level (ft.): 31.62 Height of Water Column: 19.88
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes ✓ No
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .65 gal./ft. x 19.88 ft. = 38.76 gal.

Time	Purged (gallons)	Temp F °	mΩ	pH	Notes
1330	00				
1342	10	74.0	1376	6.86	H ₂ O Cloudy Brown
1346	20	73.4	1355	6.91	" " "
1350	30	73.2	1360	6.91	" " "
1353	35	74.1	1366	6.89	" " "
1356	39	73.9	1362	6.89	" " "

Total Purged (gallons): 39.0 No. of Casing Volumes: 3
Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record:

- pH Meter Calibration: Zeroed to: _____ Spanned to: _____
- Ambient Temp. 67 ° Clear, Sunny, Foggy, Partly Cloudy, Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes ✓ No _____

Notes: _____

WATER SAMPLE LOG

Project Name: Monadnock Date: 2-6-96
 Well No.: MW-11 Location: ON-SITE Collected By: B.W & LR

Well Purging Method: 3.5" PVC BAILER
 Total Depth (ft.): 96.65 H₂O Level (ft.): 32.10 Height of Water Column: 64.55
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes No
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .65 gal./ft. x 64.55 ft. = 125.87 gal.

Time	Purged (gallons)	Temp F	mΩ	pH	Notes
0810	cc				
0825	20	68.1	999	7.71	H ₂ O - Clear - Slight Film
0830	40	68.1	1105	7.50	" " "
0835	60	68.2	1125	7.39	" " "
0843	80	67.9	1120	7.22	" " "
0848	100	69.0	1134	7.16	" " "
0850	110	69.5	1139	7.12	" " "
0854	120	69.4	1137	7.12	" " "
0856	126	69.6	1139	7.11	" " "

Total Purged (gallons): 126.0 No. of Casing Volumes: 3
 Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record:

- Ph Meter Calibration: Zeroed to: 7.0 Spanned to: 10.0
- Ambient Temp. 63 ° Clear, Sunny, Foggy, Partly Cloudy Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes _____ No

Notes: _____

WATER SAMPLE LOG

Project Name: Monadnock Date: 2-5-96
 Well No.: MW-12 Location: OFF - SITE Collected By: B.W & LR

Well Purging Method: 3.5" PVC BAILER
 Total Depth (ft.): 49.49 H₂O Level (ft.): 30.10 Height of Water Column: 18.79
 Decon. Method: 1 Wash - 3 Rinses Equipment Deconed Prior to Use: Yes No
 Casing volumes to be purged: 2" (0.16 gal./ft.) 4" (0.65 gal./ft.) 5" (1.02 gal./ft.) 6" (1.47 gal./ft.)

3 casing vol. x .65 gal./ft. x 18.79 ft. = 36.64 gal.

Time	Purged (gallons)	Temp F °	mΩ	pH	Notes
1000	00				
1010	08	70.8	1183	7.18	H ₂ O Cloudy Brown
1014	13	71.2	1195	7.15	" " "
1018	20	71.2	1268	7.07	" " "
1021	25	71.4	1298	7.06	" " "
1024	30	71.1	1298	7.06	" " "
1030	37	71.0	1291	7.07	" " "

Total Purged (gallons): 37.0 No. of Casing Volumes: 3
 Well Sampling Method: 1.5" Teflon Bailer
 Decon. Method: 1 Wash - 3 Rinses

Sample Container	Sample ID#	Sample Analysis

Observations/Notes/Calibration record:

- Ph Meter Calibration: Zeroed to: 7.0 Spanned to: 10.0
- Ambient Temp. 65 ° Clear, Sunny, Foggy, Partly Cloudy, Cloudy, Drizzle, Rain, Snow, Wind _____
- Decon H₂O changed out after this well: Yes No _____

Notes: _____

APPENDIX B

ANALYTICAL LABORATORY REPORTS

AND

CHAIN-OF-CUSTODY FORMS

CKY

**C K Y incorporated
Analytical Laboratories**

Date: 02-13-1996
CKY Batch No.: 96B018

Attn: Debbie Takashima

TRW
One Space Park Drive, E2/4050
Redondo Beach, CA 90278

Subject: Laboratory Report
Project: Monadnock

Enclosed is the Laboratory report for samples received on 02/07/96. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

Sample ID	Control No.	Matrix	Analysis
M960206-1	B018-01	Water	EPA 8010
M960206-2	B018-02	Water	Cyanide
M960206-3	B018-03	Water	Metals
M960206-4	B018-04	Water	EPA 8010
M960206-5	B018-05	Water	EPA 8010
M960206-6	B018-06	Water	EPA 8010
M960206-7	B018-07	Water	Cyanide
M960206-8	B018-08	Water	Metals
M960206-9	B018-09	Water	EPA 8010
M960206-10	B018-10	Water	Cyanide
M960206-11	B018-11	Water	Metals
M960206-12	B018-12	Water	EPA 8010
M960206-13	B018-13	Water	Cyanide
M960206-14	B018-14	Water	Metals
M960206-15	B018-15	Water	EPA 8010
M960206-16	B018-16	Water	Cyanide
M960206-17	B018-17	Water	Metals
M960206-18	B018-18	Water	EPA 8010
M960206-19	B018-19	Water	Cyanide
M960206-20	B018-20	Water	Metals
M960206-21	B018-21	Water	EPA 8010
M960206-22	B018-22	Water	Cyanide
M960206-23	B018-23	Water	Metals
M960206-24	B018-24	Water	EPA 8010

Sample ID	Control No.	Matrix	Analysis
M960206-25	B018-25	Water	Cyanide
M960206-26	B018-26	Water	Metals
M960206-27	B018-27	Water	EPA 8010

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

K.Y. Pang
Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

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CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-12 (MW-1)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-12	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

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PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	94	65-135

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MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

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 CLIENT: TRW DATE COLLECTED: 02/06/96
 PROJECT: Monadnock DATE RECEIVED: 02/07/96
 BATCH NO.: 96B018 DATE EXTRACTED: NA
 SAMPLE ID: M960206-24 (MW-2) DATE ANALYZED: 02/09/96
 CONTROL NO.: B018-24 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 2.5

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PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	12.5
Chloromethane	ND	12.5
Vinyl Chloride	ND	12.5
Bromomethane	ND	12.5
Chloroethane	ND	12.5
Trichlorodifluoromethane	ND	2.5
1,1-Dichloroethene	98	2.5
Methylene Chloride	ND	12.5
cis-1,2-Dichloroethene	ND	2.5
trans-1,2-Dichloroethene	ND	2.5
1,1-Dichloroethane	ND	2.5
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	200	2.5
1,2-Dichloropropane	ND	2.5
Dibromomethane	ND	2.5
Bromodichloromethane	ND	2.5
2-Chloroethyl vinyl ether	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	3.5	2.5
Tetrachloroethene	69	2.5
1,3-Dichloropropane	ND	2.5
1,1,1,2-Tetrachloroethane	ND	2.5
Dibromochloromethane	ND	2.5
Ethylene Dibromide	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
Chlorotoluene	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5
Benzylchloride	ND	2.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	122	65-135

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MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-15 (MW-3)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-15	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	106	65-135

MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-9 (MW-4)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-09	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorodifluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	105	65-135

MDL: Method Detection Limit

EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-27 (MW-7)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-27	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	36	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	120	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	18	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	118	65-135

MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

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CLIENT: TRW	DATE COLLECTED: 02/06/96
PROJECT: Monadnock	DATE RECEIVED: 02/07/96
BATCH NO.: 96B018	DATE EXTRACTED: NA
SAMPLE ID: M960206-18 (MW-8)	DATE ANALYZED: 02/09/96
CONTROL NO.: B018-18	MATRIX: WATER
% MOISTURE: NA	DILUTION FACTOR: 1

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PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	17	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	35	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	11	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	97	65-135

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MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-21 (MW-11)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-21	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	12	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	40	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	3.8	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	122	65-135

MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-4 (MW-12)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-04	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	5

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorodifluoromethane	ND	55
1,1-Dichloroethene	230	55
Methylene Chloride	ND	25
cis-1,2-Dichloroethene	ND	25
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloroethane	ND	25
Trichloroethene	380	25
1,2-Dichloropropane	ND	25
Dibromomethane	ND	25
Bromodichloromethane	ND	25
2-Chloroethyl vinyl ether	ND	25
trans-1,3-Dichloropropene	ND	25
cis-1,3-Dichloropropene	ND	25
1,1,2-Trichloroethane	ND	25
Tetrachloroethene	60	25
1,3-Dichloropropane	ND	25
1,1,1,2-Tetrachloroethane	ND	25
Dibromochloromethane	ND	25
Ethylene Dibromide	ND	25
Chlorobenzene	ND	25
Bromoform	ND	25
1,1,2,2-Tetrachloroethane	ND	25
Chlorotoluene	ND	25
1,3-Dichlorobenzene	ND	25
1,4-Dichlorobenzene	ND	25
1,2-Dichlorobenzene	ND	25
Benzylchloride	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	121	65-135

MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-5 (MW-12 Duplicate)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-05	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	5

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
1,1-Dichloroethene	210	25
Methylene Chloride	ND	25
cis-1,2-Dichloroethene	ND	25
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
Chloroform	ND	25
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloroethane	ND	25
Trichloroethene	360	25
1,2-Dichloropropane	ND	25
Dibromomethane	ND	25
Bromodichloromethane	ND	25
2-Chloroethyl vinylether	ND	25
trans-1,3-Dichloropropene	ND	25
cis-1,3-Dichloropropene	ND	25
1,1,2-Trichloroethane	ND	25
Tetrachloroethene	57	25
1,3-Dichloropropane	ND	25
1,1,1,2-Tetrachloroethane	ND	25
Dibromochloromethane	ND	25
Ethylene Dibromide	ND	25
Chlorobenzene	ND	25
Bromoform	ND	25
1,1,2,2-Tetrachloroethane	ND	25
Chlorotoluene	ND	25
1,3-Dichlorobenzene	ND	25
1,4-Dichlorobenzene	ND	25
1,2-Dichlorobenzene	ND	25
Benzylchloride	ND	25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	111	65-135

MDL: Method Detection Limit



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EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	M960206-6 (Equipment Blank)	DATE ANALYZED:	02/08/96
CONTROL NO.:	B018-06	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	109	65-135

MDL: Method Detection Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT: TRW	DATE COLLECTED: 02/06/96
PROJECT: Monadnock	DATE RECEIVED: 02/07/96
BATCH NO.: 96B018	DATE EXTRACTED: NA
SAMPLE ID: M960206-1 (Trip Blank)	DATE ANALYZED: 02/09/96
CONTROL NO.: B018-01	MATRIX: WATER
% MOISTURE: NA	DILUTION FACTOR: 1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinylether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	121	65-135

MDL: Method Detection Limit

EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS

CLIENT:	TRW	DATE COLLECTED:	NA
PROJECT:	Monadnock	DATE RECEIVED:	NA
BATCH NO.:	96B018	DATE EXTRACTED:	NA
SAMPLE ID:	MBLK1W	DATE ANALYZED:	02/08/96
CONTROL NO.:	VAL567B	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl Chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorodifluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	1
trans-1,2-Dichloroethene	ND	1
1,1-Dichloroethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
Carbon Tetrachloride	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
2-Chloroethyl vinyl ether	ND	1
trans-1,3-Dichloropropene	ND	1
cis-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
1,1,1,2-Tetrachloroethane	ND	1
Dibromochloromethane	ND	1
Ethylene Dibromide	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Chlorotoluene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
Benzylchloride	ND	1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	124	65-135

MDL: Method Detection Limit



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CKY QUALITY CONTROL DATA
MS/MSD ANALYSIS

IENT: TRW
JECT: Monadnock
THOD: EPA 8010
ATRIX: WATER
% MOISTURE: NA

BATCH NO.: 96B018
SAMPLE ID: M960206-12
NTROL NO.: B018-12

DATE RECEIVED: 02/07/96
DATE EXTRACTED: NA
DATE ANALYZED: 02/09/96

ACCESSION: 96B018

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD %	QC LIMIT. %	RPD LIMIT %
1,1-Dichloroethene	ND	50.00	50.60	101	50.00	46.70	93	8	65-135	30
Trichloroethene	ND	50.00	48.70	97	50.00	46.00	92	6	65-135	30
Chlorobenzene	ND	50.00	52.70	105	50.00	51.90	104	2	65-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	QC LIMIT %
Bromofluorobenzene	50.00	42.70	85	50.00	41.80	84	65-135



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

CKY QUALITY CONTROL DATA
LCS/LCD ANALYSIS

IENT: TRW
JECT: Monadnock
ETHOD: EPA 8010
ATRIX: WATER
% MOISTURE: NA

BATCH NO.: 96B018 DATE RECEIVED: NA
SAMPLE ID: LCS1W/LCS1WD DATE EXTRACTED: NA
NTROL NO.: VAL567L/C DATE ANALYZED: 02/08/96

ACCESSION: 96B018

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
1,1-Dichloroethene	ND	20.00	22.20	111	20.00	22.20	111	0	70-125	30
Trichloroethene	ND	20.00	22.50	112	20.00	21.80	109	3	70-125	30
Chlorobenzene	ND	20.00	22.00	110	20.00	22.00	110	0	70-125	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT %
Dromofluorobenzene	50.00	46.70	93	50.00	46.30	93	65-135



EPA METHOD 335.2
TOTAL CYANIDE

=====

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	02/12/96
MATRIX:	WATER	DATE ANALYZED:	02/13/96

=====

SAMPLE ID	CONTROL NO	RESULT (mg/L)	DILUTION FACTOR	MDL (mg/L)
M960206-2 (MW-12)	B018-02	0.38	20	.2
M960206-7 (MW-4)	B018-07	ND	1	.2
M960206-10 (MW-1)	B018-10	ND	1	.2
M960206-13 (MW-3)	B018-13	ND	1	.2
M960206-16 (MW-8)	B018-16	ND	1	.2
M960206-19 (MW-11)	B018-19	ND	1	.2
M960206-22 (MW-2)	B018-22	1.60	100	.1
M960206-25 (MW-7)	B018-25	0.37	20	.2
MBLK1W	CNB010WB	ND	1	.01

MDL: Method Detection Limit



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CKY QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TRW
OBJECT: Monadnock
METHOD: EPA 335.2
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 96B018 DATE RECEIVED: NA
SAMPLE ID: LCS1W/LCS1WD DATE EXTRACTED: 02/12/96
CONTROL NO.: CNB010WL/C DATE ANALYZED: 02/13/96

ACCESSION: 96B018

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT. %	RPD LIMIT %
Cyanide	ND	.025	.026	104	.025	.025	100	4	85-115	20



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EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	02/08/96
SAMPLE ID:	M960206-11 (MW-1)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-11	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	ND

EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	02/08/96
SAMPLE ID:	M960206-23 (MW-2)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-23	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	85.6



EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	02/08/96
SAMPLE ID:	M960206-14 (MW-3)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-14	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	ND



EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT: TRW DATE COLLECTED: 02/06/96
PROJECT: Monadnock DATE RECEIVED: 02/07/96
BATCH NO.: 96B018 DATE EXTRACTED: 02/08/96
SAMPLE ID: M960206-8 (MW-4) DATE ANALYZED: 02/09/96
CONTROL NO.: B018-08 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	ND



EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT: TRW DATE COLLECTED: 02/06/96
PROJECT: Monadnock DATE RECEIVED: 02/07/96
BATCH NO.: 96B018 DATE EXTRACTED: 02/08/96
SAMPLE ID: M960206-26 (MW-7) DATE ANALYZED: 02/09/96
CONTROL NO.: B018-26 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	36.3



EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT: TRW DATE COLLECTED: 02/06/96
PROJECT: Monadnock DATE RECEIVED: 02/07/96
BATCH NO.: 96B018 DATE EXTRACTED: 02/08/96
SAMPLE ID: M960206-17 (MW-8) DATE ANALYZED: 02/09/96
CONTROL NO.: B018-17 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	20.5



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EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT: TRW DATE COLLECTED: 02/06/96
PROJECT: Monadnock DATE RECEIVED: 02/07/96
BATCH NO.: 96B018 DATE EXTRACTED: 02/08/96
SAMPLE ID: M960206-20 (MW-11) DATE ANALYZED: 02/09/96
CONTROL NO.: B018-20 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	ND



EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT:	TRW	DATE COLLECTED:	02/06/96
PROJECT:	Monadnock	DATE RECEIVED:	02/07/96
BATCH NO.:	96B018	DATE EXTRACTED:	02/08/96
SAMPLE ID:	M960206-3 (MW-12)	DATE ANALYZED:	02/09/96
CONTROL NO.:	B018-03	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	37.5

EPA METHOD 3005/6010
METALS BY ICP

=====

CLIENT:	TRW	DATE COLLECTED:	NA
PROJECT:	Monadnock	DATE RECEIVED:	NA
BATCH NO.:	96B018	DATE EXTRACTED:	02/08/96
SAMPLE ID:	IBLK1W	DATE ANALYZED:	02/09/96
CONTROL NO.:	IPB017WB	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

Element	Det Limit (ug/L)	RESULT (ug/L)
Cadmium	5	ND
Chromium	10	ND



CKY QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: TRW
PROJECT: Monadnock
METHOD: EPA 3005/6010
MATRIX: WATER

BATCH NO.: 96B018 DATE RECEIVED: 02/07/96
SAMPLE ID: M960206-23 DATE EXTRACTED: 02/08/96
CONTROL NO.: B018-23 DATE ANALYZED: 02/09/96

ACCESSION: 96B015 96B018

PARAMETER	SAMPLE RESULT (ug/L)	DUP SAMPLE RESULT (ug/L)	RPD RESULT (%)
Cadmium	ND	ND	0
Chromium	85.6	84.5	1

Q LIMIT: 20

CKY

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CKY QUALITY CONTROL DATA
SPIKE ANALYSIS

CLIENT: TRW
PROJECT: Monadnock
METHOD: EPA 3005/6010
MATRIX: WATER

=====

BATCH NO.: 96B018 DATE RECEIVED: 02/07/96
SAMPLE ID: M960206-23 DATE EXTRACTED: 02/08/96
CONTROL NO.: B018-23 DATE ANALYZED: 02/09/96

ACCESSION: 96B015 96B018

PARAMETER	SAMPLE RESULT (ug/L)	SPIKE CONC. (ug/L)	SPIKE RESULT (ug/L)	SPIKE RECRY. (%)
Cadmium	ND	1000	989	99
Chromium	85.6	1000	1110	102

QC LIMIT: 70-130



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CKY QUALITY CONTROL DATA
SPIKE ANALYSIS

CLIENT: TRW
PROJECT: Monadnock
METHOD: EPA 3005/6010
MATRIX: WATER

=====

BATCH NO.: 96B018 DATE RECEIVED: 02/07/96
SAMPLE ID: M960206-23 DATE EXTRACTED: 02/08/96
CONTROL NO.: B018-23 DATE ANALYZED: 02/09/96

ACCESSION: 96B015 96B018

PARAMETER	SAMPLE RESULT (ug/L)	SPIKE CONC. (ug/L)	SPIKE RESULT (ug/L)	SPIKE RECRY. (%)
Cadmium	ND	1000	989	99
Chromium	85.6	1000	1110	102

QC LIMIT: 70-130



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96B018

A5|R6A5

CLIENT
NAME: TRW
ADDRESS: ONE SPACE PARK
REDONDO BEACH, CA
PHONE NO. 813-2722 FAX NO.
PROJECT NAME: MONADNOCK
SEND REPORT TO: DEBBIE TAKASHIMA

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 2-6-96
PAGE 1 OF 2

CKY incorporated
Analytical Laboratories
630 Maple Ave.
Torrance, Calif. 90503
Tel: 310-618-8889
Fax: 310-618-0818



SAMPLE NUMBER	SAMPLING DATE/TIME	PRESER-VATIVE	CONTAINER SIZE/TYPE	TURN AROUND TIME			ANALYSES REQUIRED					
				NORMAL <input checked="" type="checkbox"/>								
				WATER	SOIL	OTHER	418.1	M8015	8010/601	8020/602	8080/608	8240/624
1 M960206-1	2-6-96 0950	HCl	1-40ML VOA VIAL	X						X		
2 M960206-2		0950 NAOH	1-1,000ML HDPE								X	
3 M960206-3		0950 HNO3	1-500 ML HDPE									X
4 M960206-4		0950 HCl	2-40ML VOA VIALS					X				
5 M960206-5		1000 HCl						X				
6 M960206-6		1010 HCl	↓					X				
7 M960206-7		1100 NAOH	1-1,000ML HDPE							X		
8 M960206-8		1100 HNO3	1-500ML HDPE								X	
9 M960206-9		1100 HCl	2-40ML VOA VIALS					X				
10 M960206-10		1120 NAOH	1-1,000ML HDPE							X		
11 M960206-11		1120 HNO3	1-500ML HDPE								X	
12 M960206-12		1120 HCl	2-40ML VOA VIALS					X				
13 M960206-13		1140 NAOH	1-1,000ML HDPE								X	
14 M960206-14	↓	1140 HNO3	1-500ML HDPE	↓								X

COMMENTS: PLEASE SEND RESULTS ON DISK

T=ICED

Relinquished by: (Signature) : Bart Wessel	Date: 2-6-96	Received by: (Signature) : Bart Wessel	Date: 2-6-96	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:
Company: TRW	Time: 4:50	Company: CKY	Time: 4:50 PM	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

96B018

A5/R6A5



CKY incorporated
Analytical Laboratories.
630 Maple Ave.
Torrance, Calif. 90503
Tel: 310-618-8889
Fax: 310-618-0818

CLIENT NAME: TRW
ADDRESS: ONE SPACE PARK
REDONDO BCH., CA
PHONE NO. 813-2722 FAX NO.
PROJECT NAME: MONADNOCK
SEND REPORT TO: DEBBIE TAKASHIMA

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 2-6-96
PAGE 2 OF 2

SAMPLER NAME/SIGNATURE	TURN AROUND TIME		ANALYSES REQUIRED						
			NORMAL <input checked="" type="checkbox"/>		RUSH <input type="checkbox"/>		CAM Metals	CYANIDE	CHROMIUM
	418.1	M8015	8010/601	8020/602	8080/608	8240/624	8270/625	335.2	MERCURY
15 M960206-15	2-6-96	1140	HCl	2-40ML. VOA VIALS	X		X		
16 M960206-16		1245	NAOH	1-1,000 ML. HOPE				X	
17 M960206-17		1245	HNO3	1-500 ML. HDPE				X	
18 M960206-18		1245	HCl	2-40ML. VOA VIALS			X		
19 M960206-19		1305	NAOH	1-1,000 ML. HDPE				X	
20 M960206-20		1305	HNO3	1-500 ML. HDPE				X	
21 M960206-21		1305	HCl	2-40ML. VOA VIALS			X		
22 M960206-22		1325	NAOH	1-1,000 ML. HDPE				X	
23 M960206-23		1325	HNO3	1-500 ML. HDPE				X	
24 M960206-24		1325	HCl	2-40 ML. VOA VIALS			X		
25 M960206-25		1345	NAOH	1-1,000 ML. HOPE				X	
26 M960206-26		1345	HNO3	1-500 ML. HDPE				X	
27 M960206-27	↓	1345	HCl	2-40ML. VOA VIALS	↓		X		

COMMENTS: PLEASE SEND RESULTS ON DISK.

T = ICED

Relinquished by: (Signature) <u>Bart Wessel</u>	Date: 2-6-96	Received by: (Signature) <u>CKY</u>	Date: 2-6-96	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:
Company: TRW	Time: 4:50 pm	Company: CKY	Time: 4:50 pm	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

CKY

CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

SAMPLE RECEIPT FORM

CONTROL NO.	96B018
CLIENT	TRW
PROJECT	MONAD NOCK

DATE	02-06-96
TIME	4:50 PM
RECIPIENT	I-PATEL

SAMPLE TRANSPORTATION TO CKY LABORATORY:		BY	ON(DATE)	AT(TIME)	FROM(SITE/CO.)	COMMENTS
PICKED-UP BY CKY COURIER						
DELIVERED BY CLIENT		S&G coc				
SHIPPED/AIRBILL NO						
SAMPLE BATCH PACKAGING/SEALING UPON RECEIPT:		NO CONTAINER	INTACT	DAMAGED	NOT SEALED	SEALED
CONTAINER:	INSIDE TEMPERATURE: ICED C		CUSTODY SEAL /OTHER SEAL		LOCATION	NUMBER
COOLER	PACKAGING	TYPE	SUFFICIENCY	INTACT	DAMAGED	
BOX	INSULATION:	ice		NAME:		
OTHER:	ICE/COOLANT: REGULAR	↓		DATE:		
	PACKING MATERIAL: NONE	↓		TIME:		
SAMPLE DOCUMENTATION/CHAIN-OF-CUSTODY(COC)		NONE	HANDCARRIED	ENCLOSED	FAXED	SEALED
SAMPLE LOG-IN:		CRITERIA	COMMENTS		DISCREPANCY	
SAMPLE CUSTODY SEAL		EVERY SAMPLE	NONE			
CONTAINER TYPE/MATERIAL		APPROPRIATE	ice			
SAMPLE AMOUNT		ENOUGH				
SAMPLE PRESERVATION/HOLDING TIME		SUFFICIENT				
HEADSPACE/BUBBLES		ZERO/NONE				
SAMPLE LABEL INFORMATION		SUFFICIENT				
CHAIN-OF-CUSTODY INFORMATION		SUFFICIENT				
SAMPLE INFO.:	SAMPLE ID	DATE	TIME	SIGNATURE	ANALYSES	PRESERVATIVE
INDIVIDUAL SAMPLE CONTAINER:		NONE	PLASTIC BAG	CAN	OTHER(SPECIFY):	CONTAINER SEALED
SAMPLE NUMBER	CLIENT ID	DISCREPANCY			ACTION	
CLIENT SERVICES COPY RECEIVED BY		S&G coc		DATE	TIME	

GROUNDWATER ANALYTICAL QC LOG

Project: Monadnock
 Date: 2-6-96

Sample Number	Well Number	Time	QC Sample	Samplers Initials
M960206-1	MW-12	0950	TRIP BLANK	BW/LR
M960206-2	MW-12	0950	N/A	BW/LR
M960206-3	MW-12	0950	N/A	BW/LR
M960206-4	MW-12	0950	N/A	LR/BW
M960206-5	MW-12	1000	DUPLICATE	LR/BW
M960206-6	MW-12	1010	EQUIP BLANK	LR/BW
M960206-7	MW-4	1100	N/A	BW/LR
M960206-8	MW-4	1100	N/A	BW/LR
M960206-9	MW-4	1100	N/A	BW/LR
M960206-10	MW-1	1120	N/A	LR/BW
M960206-11	MW-1	1120	N/A	LR/BW
M960206-12	MW-1	1120	N/A	LR/BW
M960206-13	MW-3	1140	N/A	BW/LR
M960206-14	MW-3	1140	N/A	BW/LR
M960206-15	MW-3	1140	N/A	BW/LR
M960206-16	MW-8	1245	N/A	LR/BW
M960206-17	MW-8	1245	N/A	LR/BW
M960206-18	MW-8	1245	N/A	LR/BW
M960206-19	MW-11	1305	N/A	BW/LR
M960206-20	MW-11	1305	N/A	BW/LR
M960206-21	MW-11	1305	N/A	BW/LR

Decon H₂O changed out after well number:MW-12, MW-3

Observations/Notes:

013.1